

volume form is received by an institution, the cards relating to one or more taxonomic groups, or to one or more topics as physiology or anatomy, are often of great aid to an individual working therein.

The book form is furnished both by the *Zoological Record* and the *Bibliographica Zoologica* of the Concilium. Opinions doubtless vary as to which of these is more conveniently arranged. Both necessarily include many cross-references and their usefulness is measured, to a great degree, by the completeness of these. This also applies to the cards. No great research is required to discover, even in the latest issues of all three series, that the cross-references are by no means complete and that dependence on them will not furnish the reader with all the references on a given subject that each volume or set of cards contains.

It is a great pity that two distinct organizations exist for the same purpose and it would seem to be true economy, especially in these days, for the two bodies to combine their labors for the greatest benefit of workers in all branches of Zoology and, united or co-operating, continue to issue volumes (annually or oftener) and cards, to suit the different needs of institutions and individuals. Happily, we understand, negotiations with such an end in view are under way. But whatever may be their outcome, financial support from all using these bibliographies is an absolute necessity and we can not urge too strongly the duty of all Zoologists (including entomologists) to sustain and strengthen these publications.

Notes and News.

ENTOMOLOGICAL GLEANINGS FROM ALL QUARTERS OF
THE GLOBE

Aphis-Lion Attacking Man (Neur., Chrysopidae).

The following observation may be of interest as a case of a predaceous insect attacking man without provocation.

With the exception of such insects which, like mosquitoes and blood-sucking flies, depend upon blood as food, insects will not generally attack man unless taken in the fingers or perhaps entangled in the

clothing. Under such conditions practically all insects with biting mouthparts—beetles, grasshoppers, the larger caterpillars, and even Dipterous larvae (Tipulidae, Tabanidae)—will make use of their mandibles, but they will hardly ever attack spontaneously.

In August, 1918, at Princeton, New Jersey, I was frequently compelled, through asthmatic attacks, to sit down on certain low stone walls forming the border of the university campus and shaded by maple and sycamore trees which were badly infested with Aphids. On such an occasion I suddenly felt a painful bite or sting on the wrist of the left hand which was on the stone. Looking for the cause, I discovered on the hand the larva of the lace-winged fly, *Chrysopa* spec., commonly called Aphis-lion, which insect had sunk both its long, hollow mandibles deep into the skin, as if for sucking, and when being removed, was not at all willing to give up. The larva had, apparently, dropped from one of the trees, and finding itself hungry, proceeded, in the absence of aphids, to attack the next best living prey it could get hold of. A few hours later the same thing was experienced a second time. Again I had placed my hand on the stone; after a few minutes a painful prick was felt, the cause of which was found to be an aphis-lion sitting on the upper side of the hand, the mandibles deeply inserted. Whether it had climbed on the hand or dropped from the tree above I was unable to ascertain. The specimens were greenish with black markings, but were not preserved.

This observation appears to show that *Chrysopa* larvae will occasionally attack man spontaneously and thus assume the role of a facultative parasite.—WERNER MARCHAND, Mendham, New Jersey.

Note on Abundance of Mosquitoes (Dip., Culicidae).

Mr. George C. Shupee, Federal Game Warden, has sent in an interesting note on a plague of mosquitoes on the north Texas coast which should be made available to entomologists. His account dated High Island, Texas, Oct. 29, 1921, is substantially as follows:

Old residents say they never were so bad before, millions and millions of them; so many perched on the automobile that one could not tell there was a glass in the back of the car. They have killed lots of cotton-tail rabbits, and every now and then meadowlarks and other birds are found dead, apparently from the ravages of the mosquitoes. The stock have either gone to the high ridges or come to the gulf where they waded out deep. A large boar hog appeared to go crazy on account of their attacks; he ran into the gulf and swam out about $1\frac{1}{2}$ miles, and was given up; he disappeared from sight time and time again in the surf, but finally he came back in. Those hunters who are going in after ducks surely earn them, wearing heavy leather gloves and stiff canvas coat, with mosquito net over head; despite all that the pests still bite, actually biting through the glove. I never experienced them so bad. Some days ago a norther blew them out into the gulf; they were drowned and washed into shore, and from Bolivar to Sabine, about 75 miles, a strip four inches wide and two deep was left along the beach. Notwithstanding this occurrence there remain apparently just as many of the mosquitoes as before.

Most of us have heard of windrows of brine-flies (*Ephydra*) being cast up on the beaches of certain western lakes, but probably few have imagined that mosquitoes ever figured in a similar phenomenon.—W. L. McATEE, U. S. Biological Survey, Washington, D. C.